# Guest Editorial

## Contemporary Behavioural Perspectives in Special Education

Behavioural psychology, in the form of applied behaviour analysis, has had a major impact on both research and practice in special education. Indeed, it is no exaggeration to claim that behaviour analysis has transformed special education over the last 25 years. It is not so very long ago that some of our clients, children (and adults) with severe, profound and multiple disabilities, were typically written off as 'untrainable', let alone educable, and were sentenced to lives of institutionalised neglect. The considerable social progress made in recent years, in changing both attitudes and practice with regard to people with disabilities and special educational needs, is unlikely to have occurred with goodwill alone unless it had also been clearly demonstrated that a dynamic, effective technology of teaching and behaviour change had been developed and implemented in special education contexts. The debt that special education owes to behaviour analysis (and, some might argue, also vice versa) is then unequivocal.

But this is not to say that there is no room for improvement or that all behavioural research and practice has been uniformly of high technical excellence and ethical acceptability. It is frequently a source of wonderment and some confusion to the non-behaviourally inclined to be told that applied behaviour analysis is a dynamic, evolving discipline and that contemporary behavioural analysts have learned from past mistakes and in the light of new knowledge. It is frustrating and of some real concern to contemporary behavioural practitioners to be dismissed as unreconstructed Watsonian behaviourists or even as Skinnerian dinosaurs (without wishing to deny for one moment the genius of our founding fathers). Behaviour analysis has grown and changed conceptually over the past 20 years or so.

The whole point of applied behaviour analysis is that it seeks to analyse, and provide solutions to, problems in the real world. Some earlier procedures advocated, however, did not seem to have been very far removed from the animal laboratory and were certainly sometimes at odds with the intellectual and moral 'zeitgeist'. The use of electric cattle prods with children with severe intellectual disability is an extreme example of an unacceptable procedure which has done immeasurable harm to the reputation of the behavioural movement. Similarly, the widespread abuse of so-called time-out procedures became synonymous with locking children up in cupboards. Over-correction too mutated to yet another punitive procedure. As early as 1972,

Winnett and Winkler were cautioning us about 'current behaviour modification in the classroom: be still, be quiet, be docile' but our behaviour management strategies were still some time in changing their focus from making life easier for the teacher to making class time more profitable for the student. Similarly, drill and rote learning practices were readily advocated even in the area of (first) language learning until the evidence for poor maintenance and generalisation prompted a consideration of more naturalistic teaching methods.

Over time, however, we have seen the development and adoption of both more effective and more acceptable intervention procedures and a concern with the social validity of our endeavours has become paramount in behavioural circles. The emphases today are clearly on empowerment and liberation rather than management and control. The aim of this special issue is to reflect these recent changes and growth in behavioural practice in special education. As will be seen, several critical themes emerge from this collection of papers.

For this Special Issue of the journal, I invited a number of behaviourally oriented researchers in special education to submit a paper based on their recent research. As may readily be appreciated, the papers are very different but, I trust, reflect the diversity of approach and perspective within contemporary behavioural practice in special education.

The first paper by Anderson, Singh, Moe and Landrum compared the effects of three spelling remediation procedures on the spelling accuracy of students with moderate intellectual disability. By using traditional small 'n' designs, the authors demonstrate the effectiveness of their chosen procedures to increase spelling proficiency and, more generally, provide a rigorous example of how behaviour analysis may be applied in academic instruction to help teachers to decide which procedures to use.

"Comparative studies of the effectiveness of teaching procedures are needed for a number of reasons. For example, teachers are often faced with making choices between alternative teaching methods and data from comparative studies can provide the basis for making such choices. Further, students may respond differently to alternative teaching techniques and, particularly, with students who have handicapping conditions, teachers need to know which methods work best."

Sadlier, Dixon and Moore's paper reports a single case study using a changing criterion procedure. By means of backward chaining and contingent social reinforcement, a fourteen year old young adult with autism was readily taught how to tie shoe laces.

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Again, as well as being a specific example, the authors suggest that this highly effective procedure might be used more generally in self-care training.

"With the move toward deinstitutionalisation gaining momentum it is incumbent upon researchers to continue to investigate procedures which will facilitate social integration ......Backward chaining within a changing criterion design proved a quick and effective behaviour enhancement procedure which might profitably be used to facilitate the acquisition of other self-care or social skills in people with intellectual disabilities."

The next paper, by Carter, comprises a thorough review of the literature on naturalistic communication training strategies for people with severe disabilities, with particular reference to the importance of communicative spontaneity. This effectively demonstrates the movement in behavioural thinking on how best to foster language and communication skills, from the early artificial and contrived training programs to the more naturalistic methods advocated today. Carter concludes,

"...... naturalistic training strategies are complex *multi-component* procedures and it is difficult to identify the active or critical components. Consequently, a taxonomy has been proposed which could assist in the evaluation of individual components of these techniques and provide a bridge between *intrusive cues and prompting strategies* and natural occasioning events."

Hinton and Ballard, in their paper, describe the teaching strategies employed by four staff working with people with intellectual disabilities. They argue that, whilst certain behavioural techniques were employed in a casual way, these staff did not use behavioural methods in any formal or structured way, in spite of having been trained in their use.

"...... we are not implying that we should abandon all behaviourally based procedures. A suggestion from the present study, however, is that the use of behavioural methods be considered as only a part of the more complex teaching process and that it may be time to evaluate the emphasis on behavioural methods in staff training."

Carter and Kemp disagree, however, in their paper responding to Hinton and Ballard. In essence, they argue that it is unwise to generalise from so small a sample and that, in any case, some of the implicit criticisms of behavioural methods evidenced by the study have largely been taken on board by contemporary behavioural practitioners.

"Many of the questions raised by Hinton and Ballard have been recognised over the past decade and some possible solutions explored ...... Responsivity to learners and the teaching of skills in natural routines should not be considered incompatible with carefully planned teaching procedures."

In their contribution to this special issue, Rees and Williams provide a description of their long-term language intervention study with children with severe intellectual disability. Using norm-referenced measures of receptive and expressive language, they assess and compare the effects of four home-based language intervention programs over three years. They identify the critical components of the behaviourally based program which they found to be most effective.

"The research has identified the effectiveness of behaviourally oriented instruction in natural environments as a means of improving the language skills of children who are severely intellectually handicapped ...... Facilitating children's language acquisition in the longer term (through early childhood to adulthood) depends on providing motivating contexts ......".

In the penultimate paper, Winter, Leung and Ma address the important question of reinforcer (and punisher) effectiveness, comparing the views of high- and low-achieving high school students. They report two studies carried out in Hong Kong which show that high- and low-achievers perceive rewards differently. This clearly has importance when introducing generic behavioural interventions into high schools.

"......there is the possibility that research such as this will lead to better behaviour management, both at the classroom level and at the level of the school."

Finally, my colleagues Hotchkis, Thompson and Kent and I offer a brief research note reporting a demonstration classroom intervention study which we carried out in the special school which forms part of Macquarie University Special Education Centre. We demonstrate that self-recording of on-task behaviour may be effectively employed with primary aged students with learning difficulties on a group contingency basis.

"......self-recording/self-monitoring is a particularly valuable intervention procedure as it lessens student dependence on the teacher and, instead, fosters independence and self-reliance. It may be seen as a vehicle for devolving to students the responsibility for their own behaviour."

Several themes, characteristic of emerging trends in behaviour analysis in special education over recent years, are evident in this collection of papers; themes that reflect a coming of age, a maturity in behavioural research and practice less evident previously. The behaviour analysts represented here demonstrate a confidence in both the technical and social validity of their work and a willingness to consider criticisms of previous behavioural approaches. I would like to draw out just a few of these themes for brief elaboration.

First, as will readily be apparent, is the unremittingly *positive* emphasis in the approaches advocated. Almost all contemporary behaviour

analysts have abandoned procedures based on aversive methods in favour of positive alternatives. (By 'aversive methods' I am not referring to verbal reprimands or simple response cost procedures which will continue to have a role to play when used sparingly in manifestly positive contexts). In our own work on effective classroom behaviour management, we actually refer to the methods advocated as, simply, 'Positive Teaching'; a description which also avoids, in educational contexts, many of the derogatory connotations associated with terms such as 'behaviour modification'. (It is interesting to note that none of the contributors to this collection use this dated term in reference to their work. It seems mainly to be employed today by critics of behavioural methods.)

Second, there is the importance of naturalistic teaching contexts. Behaviour analysts have learned the hard lesson that the more artificial and contrived the teaching context, the less likely are the behaviours learned to maintain (once the program is withdrawn) or to generalise to everyday life in the real world. (I have previously used the term 'behavioural overkill' to refer to the use of unnecessarily intrusive or artificial interventions which lead to the undesirable 'by-products' described above.) This realisation came about primarily from the difficulties experienced by behaviour analysts working in the field of language and communication but its more general application has been subsequently readily appreciated.

Third, there is the manifest commitment to teaching independence, both in the skills targeted and in the intervention procedures advocated. As mentioned earlier, behaviour analysts have become increasingly concerned with the social validity of their work. It is no longer enough merely to demonstrate a technology for achieving behaviour change. Socially responsible behaviour analysts also seek to demonstrate that the behaviour change achieved is in the client's best interests (as against, for example, the smooth running of the institution) and that the methods they employ are not only humane but are also likely to bring about lasting change with minimal intrusion into and/or restrictions on personal liberty.

These themes and others have been elaborated into a conceptual model of contemporary behavioural research and practice in education known as the 'behavioural interactionist perspective', described by Wheldall and Glynn (1988; 1989). It is an evolving perspective reflecting contemporary developments in research and conceptualisation within behaviour analysis. Many, if not all, of the papers collected here could be considered as representative of this perspective as applied to special education.

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## References

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